

ABSTRACT

A system for extending the effective distance of digital subscriber line service is provided. The system includes a central office terminal having a data interface and a plurality of line units. The system further includes at least one communication link, coupled to one of the plurality of line units, that carries signals using digital subscriber line service and at least one remote access multiplexer, coupled to the at least one communication link. The at least one remote access multiplexer includes a plurality of ports that are adapted to provide digital subscriber line service. The remote access multiplexer is adapted to multiplex signals between the plurality of ports and the at least one communication link. Further, the at least one remote access multiplexer is located at a distance from the central office terminal so as to provide digital subscriber line service to user terminals that are located more than 12 kilofeet from the central office terminal.